Newport, 4.5; Randolph, 4. Wisconsin.—Sussex, 3.

Wyomiug.-Cheyenne, about 20; Fort Bridger, 14.8,

DEPTH OF UNMELTED SNOW ON GROUND AT END OF MONTH. [Expressed in inches.]

Colorado.-Pike's Peak, 24.

Maine.—Eastport, trace.

Massachusetts.—Rowe, in drifts.

Minnesota.—Saint Vincent, 0.2.

New Hampshire .- Mount Washington, 25; Grafton, drifts in places.

#### SLEET.

Colorado.—Fort Garland, 6th, 7th, 20th, 24th, 26th, 29th.

Connecticut.—New Haven, 22d.

Dakota.—Bismarck, 6th; Fort Bennett, 4th; Fort Meade, 14th: Fort Sisseton, 14th, 22d; Morriston, 1st; Yankton, 10th. Illinois.—Chicago, 6th.

Indiana.—Indianapolis, 23d.
Iowa.—Davenport, 6th, 7th; Des Moines, 23d.

Maine.—Bangor, 27th.

Massachusetts.—Fort Warren, 8th.

Michigan.—Escanaba, 26th, 27th; Fort Brady, 11th; Grand

Haven, 3d, 5th, 22d; Marquette, 17th, 19th. Minnesota.—Saint Paul, 10th, 22d.

Montana.—Fort Shaw, 9th, 22d.

Nebraska.—Clear Creek, 23d; North Platte, 5th; Omaha, 23d.

New Hampshire.—Mount Washington, 5th, 6th, 11th, 19th.

New Jersey.—Freehold, 23d, 24th. New York.—Fort Hamilton, 29th; New York City, 22d, 23d,

Ohio.—Canal Dover, 23d; Toledo, 7th; Wauseon, 22d. Pennsylvania,—Blooming Grove, 22d; Chambersburg, 23d,

29th; Leetsdale, 22d.

Rhode Island.—Block Island, 23d; Point Judith, 23d, 24th. Virginia.—Lynchburg, 1st; Marion, 24th; Variety Mills, 1st, 24th.

Wisconsin.—La Crosse, 10th, 22d.

# SNOW FROM A CLOUDLESS SKY.

Keokuk, Iowa, 2d.—Between 7 and 8 a. m. light snow fell, while the sky was perfectly clear.

## COTTON REGION REPORTS.

The temperature and rainfall observations which were made from April to October, 1882, in the cotton districts, were resumed April 1, 1882. In determining the averages for the various districts, as given in table below, reports have been used from the same stations, as were published in the REVIEW for April, 1882.

Meteorological Record of the Cotton Districts for the month of April, 1882.

Districts.	Average rain- fall in inches.	Temperature.		Extremes.	
		Mean of the maxima.	Mean of the minima.	Highest.	Lowest.
		_ 0	٥	0	c
New Orleans	6.99	8 <b>0.</b> 0	59.6 58.0	97	40
Savannah	5.65	80.5	58.0	94	33
Charleston	3.58	76.4	54.9	89	37
Atlanta		74° i	51.0	94 89 88	30
Wilmington	4.97	70.9	48.7	87	33 37 39 26
Memphis		74.9	52.7	90	28
Galveston	1,90	79.4	57.2	98	29
Vicksburg		76.9	55.6	98 89	39
Montgomery		78.2	53.7	91	39 28
Augusta		76.8	54.7	92	31
Little Rock	6.78	75.3	53.9	90	37.2
Mobile		80.9	57.1	9t	37.2 36
			1	1	

# WINDS.

The prevailing directions of the wind for the month of April, 1883, at the Signal Service stations are shown on chart iii., by arrows flying with the wind. It will be seen from this chart storm of last night did considerable damage in this community.

Vermont.—Lunenburg, 10; Strafford, 8; Woodstock, 4.75; that the prevailing winds have been, with but few exceptions, variable in all of the districts. On the immediate California coast, they were from the west, except northwest at Cape Mendocino; and in Texas they were generally from the south.

In the following table are given the stations reporting the largest and smallest total movements of the air in each of the

various districts:

Districts.	Stations reporting largest.	Miles.	Stations reporting smallest.	Miles
New England	Block Island, R. I	9,625	New London, Conn	4,330
Middle Atlantic states.	Ocean City, Md	11,392	Lynchburg, Va	2,998
South Atlantic states	Hatteras, N. C	13.551	Atlanta, Ga	3,026
Florida peninsula	Punta Rassa	8,183	Sanford	4,904
East Gulf	Starkville, Miss	6,577	Montgomery, Ala	3,506
West Gulf	Indianola, Tex	11,722	San Antonio, Tex	4,117
Rio Grande valley	Brownsville, Tex	7,949	Eagle Pass, Tex	4,328
Ohio valley	Louisville, Ky	ú, <b>2</b> 89	Pittsburg, Pa	3,713
rennessee	Nashville	4,957	Memphis, Tenu	4,717
Lower lakes	Toledo, Ohio	8,254	Oswego, N. Y	5,55
Upper lakes	Milwaukee, Wis	10,225	Marquette, Mich	5,664
Extreme northwest	Moorhead, Minn	8,791	Saiut Vincent, Minn	5,33
Upper Mississippi valley	Keokuk, Iowa	8,313	Dubuque, Iowa	4,99
Missouri valley	Huron, Dak	8,343	Fort Bennett, Dak	5,72
Northern slope	North Platte, Neb	9,256	Billings, Mont	4,47
Middle slope	Fort Elliott, Tex	10,742	Denver, Colo,	4,62
Southern slope	Fort Sill, Ind. T	10,327	Fort Davis, Tex	5,28
Southern plateau	Santa Fé, N. Mex	8,710	Tucson, Ariz	3,40
Middle plateau	Pioche, Nev	5,983	Salt Lake City, Utah	4,91
Northern plateau	Eagle Rock, Idaho	9,350	Lewiston, Idaho	2,44
North Pacific	Portland, Oreg	4,028	Roseburg, Oreg	3,20
Middle Pacific,	Cape Mendocino, Cal.	*10,677	Sacramento, Cal	5,93
South Pacific	San Diego, Cal	5,798	Visalia, Cal	3,15

· Record for righteen days only.

On the summit of Mount Washington, New Hampshire, the total movement of the air was 23,900 miles, or 10,900 miles less than the total movement of the preceding month.

On the summit of Pike's Peak, Colorado, the total movement for the last eight days of the month was 3,102, no record having been kept during the earlier part of the month.

### HIGH WINDS.

With the exception of the following dates; viz.: 7th, 13th, 14th, 15th, 17th, 23d, 24th, 29th, maximum wind velocities of fifty miles per hour or more were daily recorded on the summit of Mount Washington, the highest velocity of the month, eighty-eight miles from the southeast, occurring on the 11th.

At Cape Mendocino, California, the following high velocities occurred: 70 se., 1st; 88 se., 2d; 51 nw., 4th; 62 se., 7th; 92 se., 14th; 100 se., 15th. During a violent hurricane on the latter date, the anemometer caps were blown away, the selfregister showing a velocity of one hundred and twenty miles per hour for the five minutes previous to the time of the breaking of the instrument. Violent gales also occurred at this place on the 18th and 19th.

Other high winds occurred during April as follows:-Cedar Keys, Florida, 50 sw., 50 se., and 71 s., on the 12th, 22d, and 23d, respectively; Fort Verde, Arizona, 60 sw., 12th; Portsmouth, North Carolina, 60 ne., 24th; Hatteras, North Carolina, 58 sw., 23d: Duluth, Minnesota, 52 ne., and 58 ne., on the 21st, and 22d, respectively; Fort Maginnis, Montana, 56 nw., 21st; Fort Sill, Indian Territory, 56 se., 21st; Bismarck, Dakota, 56 e., 21st; Indianola, Texas, 56 nw., 28th; Yankton, Dakota, 55 nw., 14th; West Las Animas, Colorado, 54 nw., 22d; Saint Paul, Minnesota, 53 se., 13th; Fort Shaw, Montana, 52 sw., 8th; North Platte, Nebraska, 52 se., 20th; Cape Henry, Virginia, 50 nw., 16th.

## LOCAL STORMS.

On Sunday, April 22d, while the centre of the storm shown as viii., on chart i., was central in eastern Kansas, very violent tornadoes occurred in the states of Iowa, Mississippi. Alabama, and Georgia. The destruction of property was very great; and in Mississippi and Georgia, there were from two to three hundred lives lost, and about one thousand persons injured.

The reports of storms of local character which have occurred

during April, arranged by states, are as follows: